

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/993,877	11/05/2001	Hakan Ozdemir	99-S-190 (1678-22-1)	8286
30431	7590 06/29/2005		EXAMINER	
STMICROELECTRONICS, INC.			RODRIGUEZ, GLENDA P	
MAIL STATION 1310 ELECTR	ON 2346 RONICS DRIVE		ART UNIT	PAPER NUMBER
CARROLLTON, TX 75006			2651	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/993,877	OZDEMIR, HAKAN			
		Examiner	Art Unit			
		Glenda P. Rodriguez	2651			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		•				
1)🛛	Responsive to communication(s) filed on 07 March 2005.					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
5)□ 6)⊠ 7)□	<ul> <li>4)  Claim(s) 1-32 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-32 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Applicat	ion Papers					
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (	under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
	ce of References Cited (PTO-892)	4) Interview Summar				
2)	ce of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	Paper No(s)/Mail [ 5) Notice of Informal 6) Other:	Date Patent Application (PTO-152)			

Application/Control Number: 09/993,877

Art Unit: 2651

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Hull et al. (US Patent No. 6, 262, 857).

Regarding Claim 1, Hull et al. teach a storage disk, comprising:

A disk sector having a beginning and operable to store data (Fig. 2A);

And a servo wedge located at the beginning of the sector and operable without a zero-frequency field to identify the sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector (See Fig. 2B, wherein it teaches a servo/data arrangement according to Hull et al.'s invention (which lie before and between data sectors). See also Fig. 3A and 3B, also Col. 16, L. 6-29 and Col. 31, L. 2-65, wherein Hull et al. teaches synchronization during a spin up without a zero-frequency field.).

Claim (3) has limitations similar to those treated in the above rejection, and is met by the references as discussed above. Claim (3) however also recite the following limitations..."no spin up wedges (See Figs. 3A and 3B), in a headerless format, there is no need for a spin up wedge as

Application/Control Number: 09/993,877

Art Unit: 2651

specified by the Applicant because Hull et al.'s lacks a zero frequency field. See also Col. 31, L..2-65.).

Claims (5, 8 and 32) have limitations similar to those treated in the above rejection, and are met by the references as discussed above. Claims (5 and 8) however also recite the following limitations..."Servo wedges detectable without a zero-frequency field upon an initial spin-up located in the disk sectors and each having a pre-synchronization-mark section of the other servo wedges and no servo wedge having a pre-synchronization-mark section with a significantly different bit pattern or a significantly different length as compared to the pre-synchronization-mark section of the other servo wedges (Col. 31, L. 2-65, wherein Hull et al. teaches using elements in SAM for synchronization, wherein it is known that there are elements in the SAM that have to be consistent throughout the disk (SSM in this case) and some other elements.)

Claims (14 and 20) have limitations similar to those treated in the above rejection, and are met by the references as discussed above. Claims (14 and 20) however also recite the following limitations..." a motor, a read head, a read head positioning circuit, a servo circuit, a servo channel and processor (See Fig. 1D, Elements 16, 20, 18, 22, 26 and 34, respectively)".

Method claim (25 and 29) are drawn to the method of using the corresponding apparatus claimed in claims (1, 3, 14, and 20). Therefore method claims (25 and 29) correspond to apparatus claims (1, 3, 14, and 20) and are rejected for the same reasons of anticipation as used above.

Regarding Claims 2, 15, 17, 22 and 27, Hull et al. teaches all the limitations of Claims 1 and 14, respectively. Hull et al. further teaches wherein the servo wedge is operable to identify

Application/Control Number: 09/993,877

Art Unit: 2651

the track during an initial positioning of a read-write head and during a subsequent read of the data from or write of the data to the track (Col.31, L. 2-65.).

Regarding Claims 4, 16, 21 and 23, Hull et al. teaches all the limitations of Claims 3 and 14. Hull et al. further teach the data comprises tracks (Fig. 2B) and each servo wedge identifies and is located in a respective track (Col. 16, L. 6-29 and Col.31, L. 2-65.).

Regarding Claim 6, Hull et al. teaches all the limitations of Claim 5. Hull et al. further teach the data comprises tracks (Fig. 2B) and each servo wedge identifies and is located in a respective track (Col. 16, L. 6-29 and Col.31, L. 2-65.).

Regarding Claims 7 and 28, Hull et al. teaches all the limitations of Claims 5 and 25, respectively. Hull et al. further teach wherein that the pre-synchronization-mark sections of the servo wedges lack erase fields (See Fig. 3A).

Regarding Claims 9, 10 and 11, Hull et al. teach all the limitations of Claim 8. Hull et al. further teach wherein each servo wedge includes a preamble, a servo synchronization mark, a servo address mark, (See Fig. 3A, Col. 14, L. 16-44.)

Regarding Claim 12, Hull teaches all the limitations of Claim 8. Hull et al. further teach wherein each servo wedge is different from the location identifier of another servo wedge (Col. 31, L. 2-65).

Regarding Claim 13, Hull et al. teaches all the limitations of Claim 8. Hull further teach wherein the position bursts of each servo wedge are different from the position bursts of another servo wedge (Col. 31, L. 2-65).

Regarding Claims 18 and 26, Hull et al. teaches all the limitations of Claims 14 and 20, respectively. Hull et al. further teach wherein the read head position circuit and the servo circuit

Application/Control Number: 09/993,877 Page 5

Art Unit: 2651

are unable to determine the position of the read head before the processor detects one servo wedge (Col. 31, L. 2-65, Hull et al. teaches the synchronization method used in its invention. It is inherent that because no zero-frequency fields are being used, synchronization is then done by an alternate method, without the need of erase fields.).

Regarding Claim 19, Hull et al. teaches all the limitations of Claim 14. Hull et al. further teach wherein the head is a read-write head (Col. 6, L. 34-47).

Regarding Claim 26, Hull et al. teaches all the limitations of Claim 25. Hull et al. further teach wherein writing the servo wedge comprises writing the servo wedge at the beginning of the disk sector (See Fig. 2B, wherein it teaches a servo/data arrangement according to Hull et al.'s invention (which lie before and between data sectors). See also Fig. 3A and 3B, also Col. 16, L. 6-29 and Col. 31, L. 2-65.).

Regarding Claims 30 and 31, Hull et al. teaches all the limitations of Claim 29. Hull et al. further teaches wherein the servo wedge is operable to identify the track during an initial positioning of a read-write head and during a subsequent read of the data from or write of the data to the track (Col. 31, L. 2-65. It is inherent that if it is able to detect at leas one (i.e. which would be the first), then it would detect the second wedge.).

## Response to Arguments

3. Applicant's arguments with respect to claim 1-32 have been considered but are moot in view of the new ground(s) of rejection. They now stand rejected in view of Hull et al.

## Conclusion

DAVID HUDSPETH

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600

Art Unit: 2651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenda P. Rodriguez whose telephone number is (571) 272-7561. The examiner can normally be reached on Monday thru Thursday: 7:00-5:00; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 23, 2005.

TEM